

US EPA ARCHIVE DOCUMENT

Designing Functional or Full-scale Operations-based Exercises with Lessons Learned, Artificialities and Realism



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- **During exercise design meetings**
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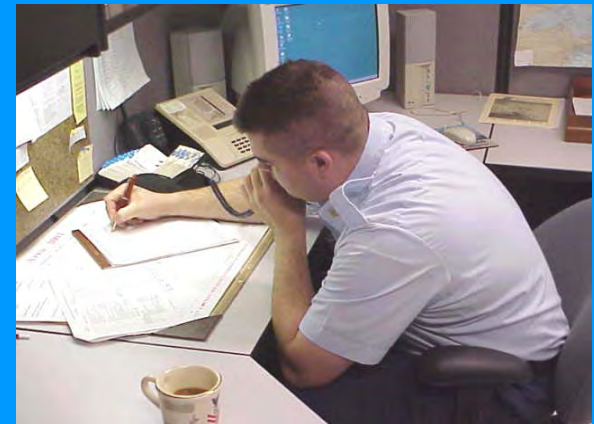
Operations-based Exercises

- Functional or full-scale
 - Complex
 - Resource intensive
 - Multi-agency, multi-jurisdictional
 - numerous first responders
 - Field operations
 - Command Post
 - Test many facets of emergency response and recovery
 - Incident or Unified Command System
 - Real-time
 - Stressful environment
 - Mirrors a real event



Role of Exercise Planners

- Initiate the process
- Homeland Security Exercise and Evaluation Program
 - primary responsibility
 - Design
 - Execute
 - Evaluate
- Includes local, regional, national response communities



More than a Year before the Exercise

Multi-Year Training and Exercise Plan (MTEP)

- facilitate exercise coordination throughout your agency, with interagency partners, and other stakeholders
- budgets
- involve outside agencies and organizations as well as industry participants
- coordinate training and exercises with your stakeholders

The screenshot shows the FEMA HSEEP website. At the top is the FEMA logo and the text 'Homeland Security Exercise and Evaluation Program'. Below this is a navigation bar with links: Home, About HSEEP, HSEEP Toolkit, Feedback, Press Room, and Contact Us. The main content area is divided into three columns. The left column, titled 'What's New', features a section for 'HSEEP Training Course and Train-the-Trainer' with details about an upcoming course for Federal Employees, limited to 50 students, with registration open. It includes a 'Course Enrollment Information' link and a date of 'Dec 2009'. Below this is a circular logo with 'T4' in the center. The middle column, titled 'HSEEP Mission', contains two paragraphs describing the program's purpose and a central circular diagram. The diagram has 'HSEEP' in the center, surrounded by four segments: 'Policy & Guidance', 'Training', 'Technology', and 'Direct Support'. The right column has two sections: 'Upcoming Events and Exercises' featuring a map of Colorado and the text 'Diablo Bravo 2008', and 'Exercise Resources' with links to 'Lessons Learned and Good Story Highlights', 'LLIS.gov Exercise Best Practice', 'HSEEP AAR-IP Template 2007', and 'Draft template for a Multiyear Training and Exercise Plan'.

FEMA Homeland Security Exercise and Evaluation Program

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What's New

HSEEP Training Course and Train-the-Trainer. FEMA will host the upcoming HSEEP Training Course with the accompanying Train-the-Trainer (TtT) for Federal Employees. Each class is limited to 50 students. Registration is now open. [Course Enrollment Information](#). Dec 2009

HSEEP Mission

The Homeland Security Exercise and Evaluation Program (HSEEP) is a capabilities and performance-based exercise program that provides a standardized methodology and terminology for exercise design, development, conduct, evaluation, and improvement planning.

The Homeland Security Exercise and Evaluation Program (HSEEP) constitutes a national standard for all exercises. Through exercises, the National Exercise Program, supports organizations to achieve objective assessments of their capabilities so that strengths, and areas for improvement are identified, corrected and shared as appropriate prior to a real incident. To learn more about the HSEEP program, click on the About HSEEP tab listed above.

The HSEEP is maintained by the Federal Emergency Management Agency's National Preparedness Directorate, Department of Homeland Security.

Upcoming Events and Exercises

Diablo Bravo 2008

Exercise Resources

[Lessons Learned and Good Story Highlights](#)
[LLIS.gov Exercise Best Practice](#)
[HSEEP AAR-IP Template 2007](#)
[Draft template for a Multiyear Training and Exercise Plan](#)

Government and Industry Cooperation and Participation

- From government perspective
 - Industry participation critical
 - Everyone needs early notification
 - scheduling functional and full-scale exercises
 - minimum a year or two before the operations-based exercise
 - budget personnel and equipment
 - commitment to participate, plan



Within a Year Before the Exercise

- *Multi-agency Pre-exercise training*



- Content of contingency plans
- Better understanding of roles and responsibilities within the Incident Command System
- Specific training that is associated with exercise objectives; i.e. shoreline cleanup assessment; alternative response capabilities

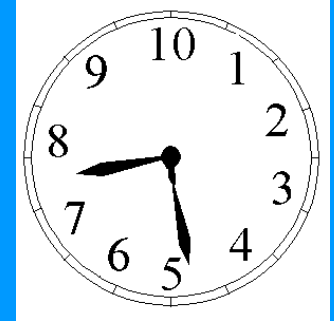
During Exercise Design Meetings

- Artificialities may prepare the response organization:
 - When to start the exercise
 - Command post set up prior to the exercise
 - Develop a pre exercise Organization Chart (ICS form 207)



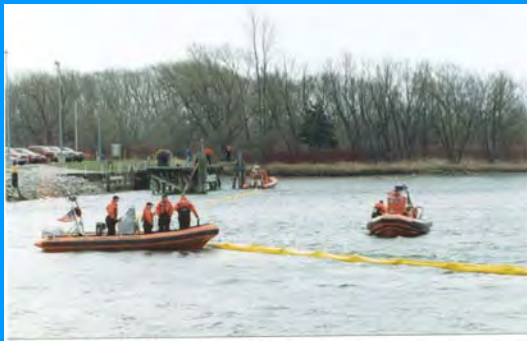
When to Start the Exercise

- Factors
 - Time: 1, 2 or more days
 - Start with incident, notifications, on scene response, command post
 - Day 2 or later issues
 - Can multi-agencies participate outside normal business day
 - Balance field activities with maximize multi-agency personnel to work within ICS



How much can you do in 1 day?

- Will time be actual, condensed, or simulated?
 - Incident occurs
 - Notifications
 - Initial response on scene
 - Mobilization to a command post
 - Mitigation tactics

A sample Incident Action Plan (IAP) form, showing the header, incident details, and a table of contents. The form is titled "INCIDENT ACTION PLAN" and includes fields for Incident Name, Incident Number, Date Plan Prepared, Prepared By, Operational Period Covered by This Plan, Approved By, OSC, State IC, and RP. It also includes a "TABLE OF CONTENTS" section with a list of items to be included in the plan, such as Incident Briefing, Summary of Current Actions, Current Organization Chart, Resource Summary, Incident Objectives, Daily Safety & Health Messages, Complete Site Safety Plan, Organization Assignments, Division/Group Assignment List, Radio Communications Plan, Medical Plan, Daily Schedule of Meetings, Incident Status Summary, Environmental Operations Plan, and Air Operations Summary. The form is marked with checkboxes and some items are already checked. At the bottom, it says "IAP APPROVED AT 1630, 26APR01".

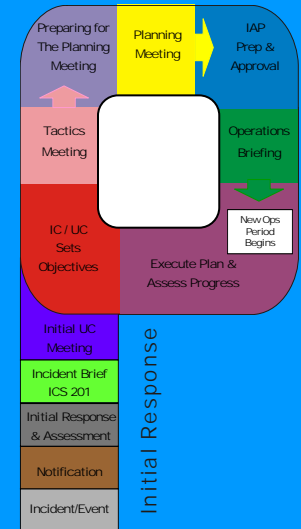
One Day Exercise

- Night time
 - Real or simulate
 - notifications
 - first responders on scene
- Day time
 - Mobilization to command post for meaningful ICS work
 - Field mitigation tactics



Multiple Day Exercise

- Do more
 - Initial response
 - Initial response plus additional issues
 - Issues beyond day 1 or 2
 - Week 2; Month 2



INCIDENT ACTION PLAN

Incident Name: 2015-04-26 1630-26APR01

Incident Number: 2015-04-26 1630-26APR01

Date Plan Prepared: 2015-04-26 1630-26APR01

Prepared By: 2015-04-26 1630-26APR01

Operational Period Covered by This Plan:

Date: Start 2015-04-26 1630 Finish 2015-04-26 1630

Time: Start 1630 Finish 1630

Approved By: 2015-04-26 1630-26APR01

State ICS: 2015-04-26 1630-26APR01

RFP: 2015-04-26 1630-26APR01

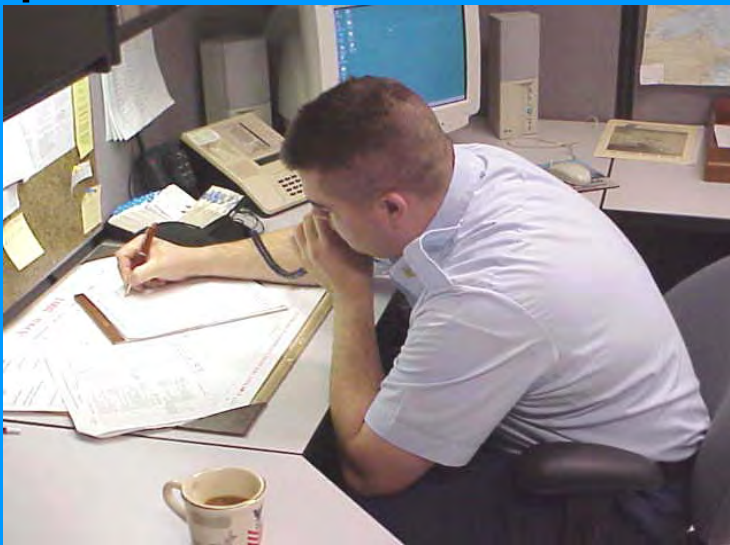
TABLE OF CONTENTS

<input type="checkbox"/> Incident Briefing, ICS 201 (all)	<input type="checkbox"/> Organization Assignments, ICS 203 (all)
<input type="checkbox"/> Daily Map(s)	<input type="checkbox"/> Division/Group Assignments List, ICS 204 (all)
<input type="checkbox"/> Summary of Current Actions	<input type="checkbox"/> Radio Communications Plan, ICS 205 (all)
<input type="checkbox"/> Current Organization Chart	<input type="checkbox"/> Medical Plan, ICS 206 (all)
<input type="checkbox"/> Resource Summary	<input type="checkbox"/> Daily Schedule of Meetings, ICS 208 (all)
<input type="checkbox"/> Incident Objectives, ICS 202 (all)	<input type="checkbox"/> Incident Status Summary, ICS 209 (all)
<input type="checkbox"/> Daily Safety & Health Message	<input type="checkbox"/> Environmental Operations Plan, ICS 212 (all)
<input type="checkbox"/> Complete Site Safety Plan: (Included in Initial Incident Action Plan only)	<input type="checkbox"/> Air Operations Summary, ICS 220 (all)
<input type="checkbox"/> Other: <u>2015-04-26 1630-26APR01</u>	
<input type="checkbox"/> Other: <u>2015-04-26 1630-26APR01</u>	
<input checked="" type="checkbox"/> 215 - OPS PLANNING WORKSHEET	
ICS 202a (all) Cover: 7/04	

IAP APPROVED AT 1630, 26APR01

Drills

- Separated from and performed independent of functional or full scale
 - notifications
 - Multi-agency first responders on scene
 - Mobilization to and establishing a command post



Pre exercise Command Post set up

- CPs should be identified in Contingency plans for large scale response organization
 - No: opportunity to address issues
 - Space; infrastructure; power; phones; internet; computer network; interagency communications
 - Yes: opportunity to test and verify



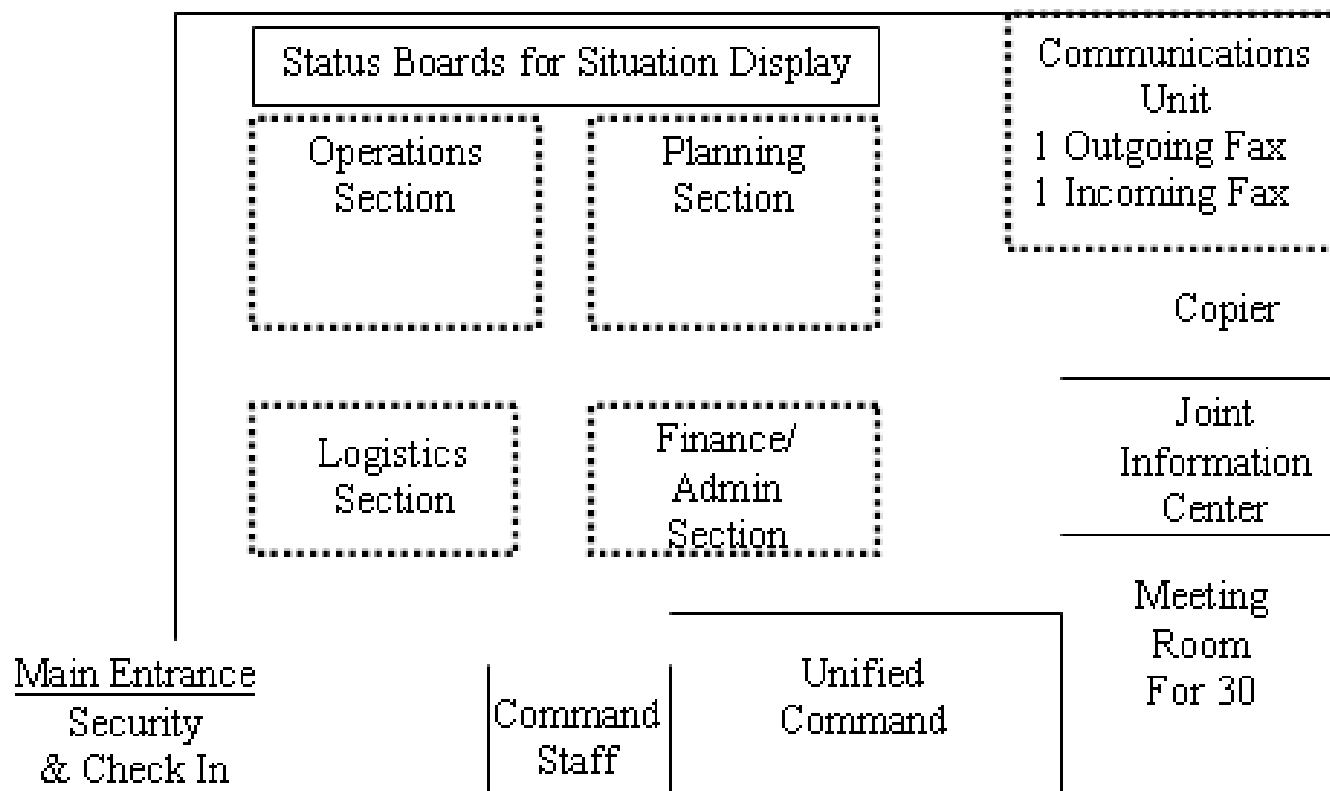
Pre exercise Command Post set up

- Maximize multi-agency team work:
 - Recommend set up command post before exercise
 - Minimum: phone lines and phones
- Even pre-established command posts have modifications and rearrangements
- Document lessons learned for plan



Command Post Designs

Proposed Command Post Design



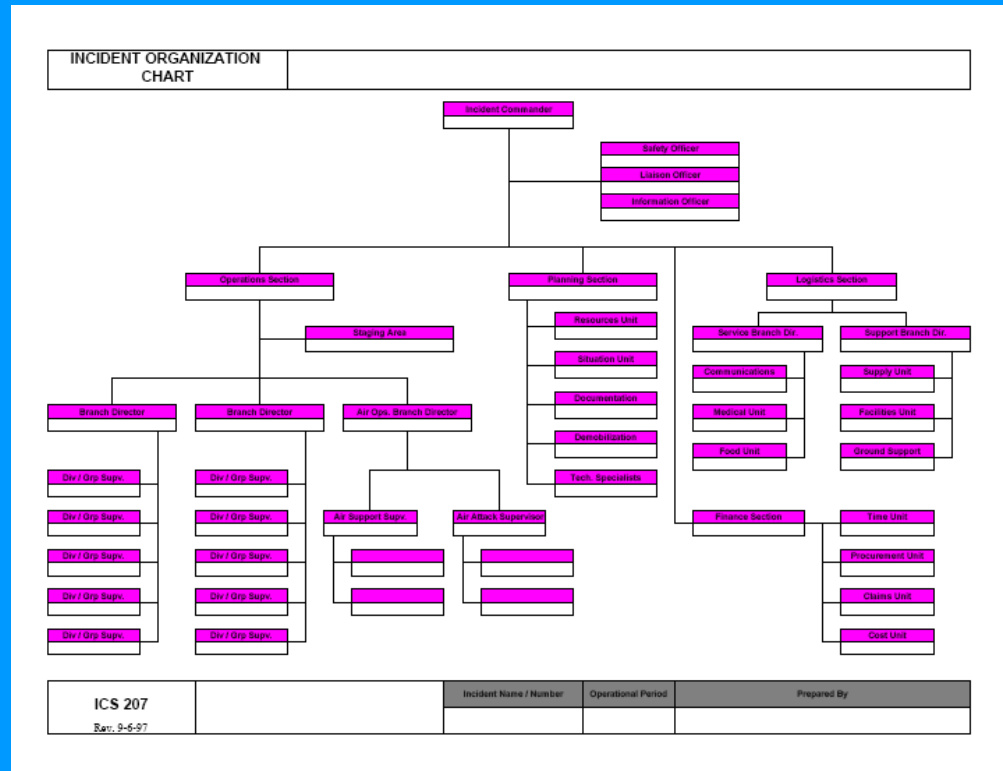
Command Post Designs



Left CP uses hard partitions to separate working areas within a gymnasium and bottom right remains open within a warehouse.

Develop a Pre Exercise Organization Chart (ICS form 207)

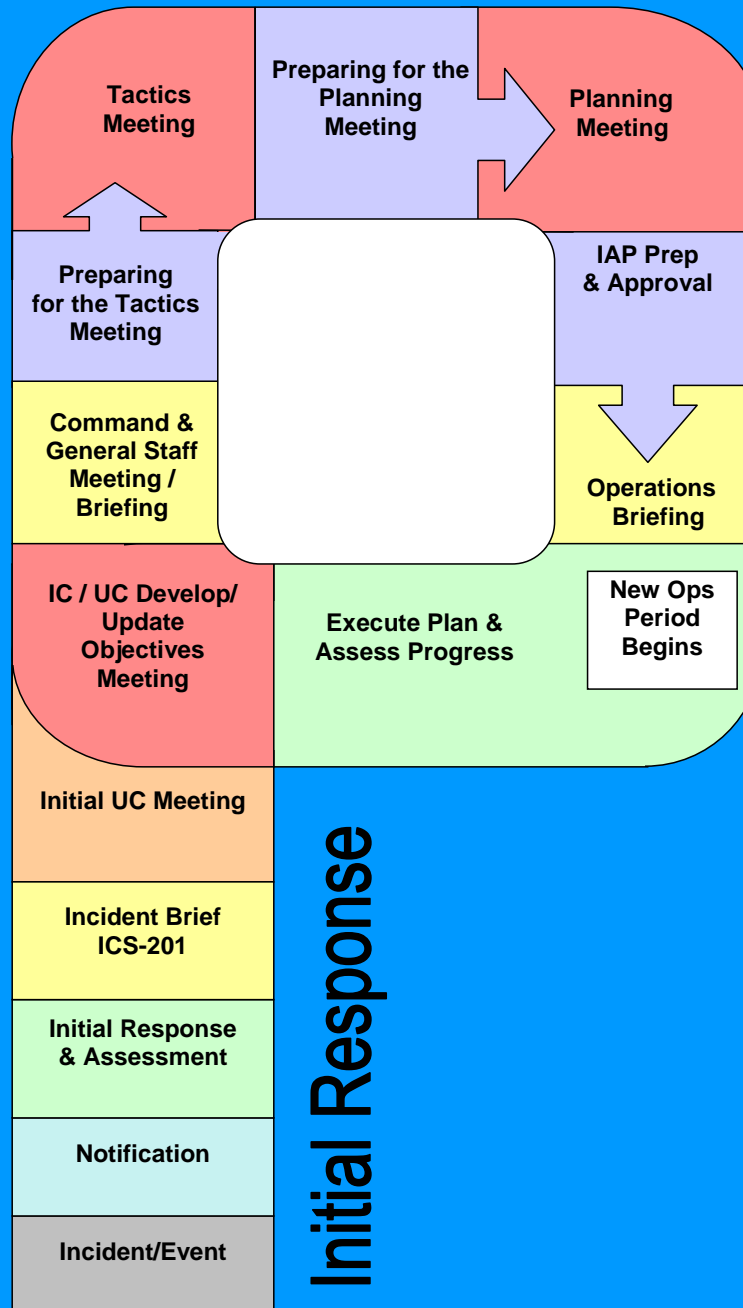
- Why? minimize chaos at check in
- Always lost personnel
 - Experienced Liaison Officer (LNO)
 - Assist placing into organization
 - At check in have designated area to wait for the LNO



Develop a Pre Exercise Organization Chart (ICS form 207)

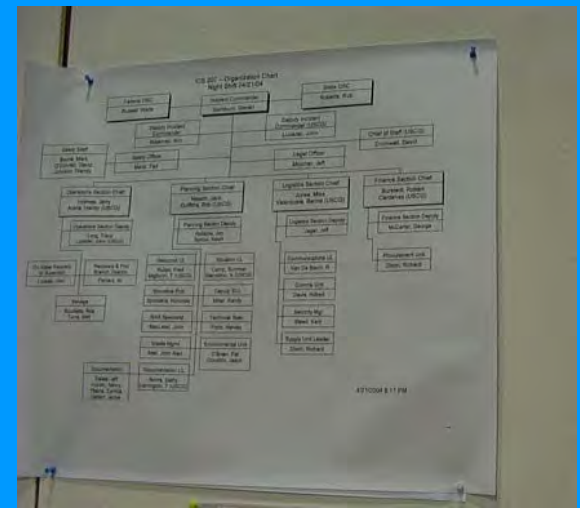
- Use experienced Incident Management Team (IMT) personnel
 - In conjunction with your unit's personnel
 - Fill key command and general staff ICS positions
 - Planning Section Chief
 - Planning P process
 - Develop an Incident Action Plan





Develop a Pre Exercise Organization Chart (ICS form 207)

- Lessons learned:
 - Contingency plans should include sample 207s for anticipated incidents such as security, pollution, or mass rescue.
 - 207s should not list specific names, but rather organizations within your community
- Individual organizations develop own Watch Quarter and Station Bills to identify personnel by name




Incident Briefing (ICS form 201) or Incident Action Plan (IAP):

1. INCIDENT NAME:
Source: [illegible]

2. Prepared By: [illegible]

3. INCIDENT BRIEFING
ICS 201-100

4. Incident Location:



5. Current Situation:

[illegible text]

NOTED BY: [illegible] ICS 201-100 (pg 1 of 6)

Incident Briefing, ICS 201

IAP Cover Sheet

Incident Name: MV Athos I

Operational Period to be covered by IAP: Period 7 (12/3/2004 08:00 to 12/4/2004 08:00)

Approved by:

FOSC – Captain Sarubbi: _____


SOSC (DE) – Kurt Reuther: _____

SOSC (PA) – Bob Bauer: _____

SOSC (NJ) – Gary Pearson: _____

RPIC – Steve Keglman: _____

Incident Action Plan



Prepared By: _____ **Prepared Date/Time:** _____

Incident Action Plan

Incident Briefing (ICS form 201) or Incident Action Plan (IAP):

- Pre-exercise, When and how to develop
- Factors
 - Time for exercise: 1, 2 or more days
 - Objectives: notifications, initial response, day 2 or later issues
 - Transfer of command
 - Incident Commander to unified command
- For exercises that run real time beginning with an incident occurring
 - players do it all: notifications, response on scene to mitigate the scenario
 - players develop the 201 and or the IAP.



Incident Briefing (ICS form 201) or Incident Action Plan (IAP):

- If the exercise begins several hours or days after initial incident:
 - simulates notifications
 - initial response and/or later
- Design team develops the 201 or IAP
 - Need input from real primary decision makers
 - incident commander(s) or unified commander's
 - A separate table top exercise with these primary decision makers
 - Document decisions and actions taken up until the start of the exercise

Incident Briefing (ICS form 201) or Incident Action Plan (IAP):

Lessons learned:

- You need the primary decision maker at the TTX
- Representative may not portray their supervisor
- Exercises have started with primary decision maker disagreeing with representative
- Exercise time is lost to readdress actions and decisions
- Exercise may continue with limited senior engagement
- When representative is used, ensure the primary person reviews at least 2 weeks before the exercise



IAP Cover Sheet	
Incident Name: MV Athos I	Operational Period to be covered by IAP: Period 7 (12/3/2004 08:00 to 12/4/2004 06:00)
Approved by:	
FOSC - Captain Sarubbi: _____	
SOSC (DE) - Kurt Reuther: _____	
SOSC (PA) - Bob Bauer: _____	
SOSC (NJ) - Gary Pearson: _____	
RPIC - Steve Kegelman: _____	

Incident Action Plan



Prepared By: _____ Prepared Date/Time: _____

Plan Field Operations

- Test new strategies and tactics or validate existing ones
- Exercise command and control on scene
- Test communications between the multi-agencies



Test Strategies and Tactics

Safety:

- Field activity challenges without injuries
 - Multi-agency 1st responders demonstrate
 - Who is in charge.
 - Process to identify and address safety hazards
 - Identify the public safety and health issues
- Overseen by “Controller Safety Officer”



Test Strategies and Tactics

- Oil and chemical exercises:
 - Deploy tactical pollution response equipment per protection strategies in the Area Contingency Plan.
 - Deployed equipment will tell:
 - Performance standards for environment of geographic area
 - Identify circulation patterns and natural/historic collection areas
 - Necessity for supplemental equipment
 - Limitations of launch sites
 - Adequacy of on scene mobile command posts
 - Lessons learned for plan



Test Strategies and Tactics

- Area Maritime Security (AMS) exercises:
 - Identify all resources per law enforcement agency; capabilities
 - Clarify Rules of Engagement/Use of Force Policy; per scenario
 - Demonstrate multi-agency vessel/facility boardings
 - Marine Transportation Safety Act regulated facilities implement all security measures per Maritime Security level.



Exercise Command and Control

- Multiagency first responders arrive on scene
 - Who is in charge of the scene; per agency
 - Understand each others authority, jurisdiction, responsibility, role, and resources
 - Respond in accordance with a plan
 - Team or unilateral
 - HAZMAT teams



Communications



- Multi-agency communication challenges
 - Geographic area, platforms, equipment
 - capabilities and limitations
- Some areas met with Communications Plan
 - equipment, frequencies, process
- Lessons learned

Exercise Execution

- *Developing an Incident Action Plan within a normal business day: realistic or artificial?*
 - Challenging for a new response organization
 - Need experienced Incident Management Team
 - Quality IAP with assignment lists (204s)



Exercise Execution

- Resolve participant frustration:
 - Use experienced and knowledgeable IMT in key ICS positions or as mentors/coaches
 - For 2 day or more exercise, continue with the Planning P process on day 2 where it ended on day 1
 - For 1 day exercise, focus on quality and let the Planning P process proceed as far as it can



Conclusion

Designing exercises that provide:

- Proper stakeholder exercise notification
- Pre-exercise training
- Pre-identifying and logistically setting up a command post
- Appropriate field operations
- A pre-exercise organization chart



Optimizes time for:

- Multi-agency personnel to work as a team
- Individuals to be proficient in ICS
- Develop a quality Incident Action Plan